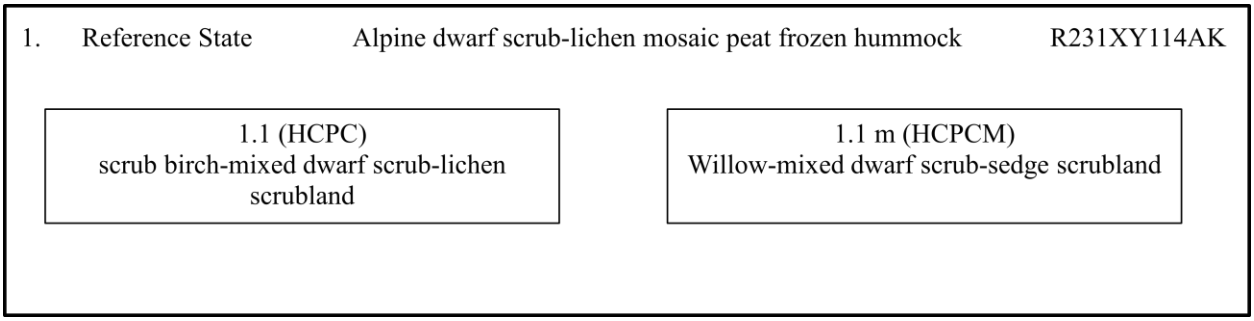
Ecological Site Description ID:	R231XY114AK

Ecological Dynamics of the Site:

This alpine ecological site occurred on the foot and/or toeslopes of mountains (i.e. < 15 % slopes). In this ecological site, cryoturbation resulted in patterned ground features known as turf hummocks. Hummocks ranged in size but were observed to be up to 15 feet in diameter. This report details two plant communities observed in association with turf hummocks. We termed these separate communities hummocks (community 1.1) and moist depressions (community 1.1 m). Pooled water was commonly observed within the moist depression communities. For community phase 1.1, soils were classified as haploturbels and were composed of organic matter over loamy cryoturbate. Disturbance resulting in other community phases was not observed.

State and Transition Diagram:



State ID Number:	1	State Name:	Reference

State Narrative:	For the climax phases, hummock communities were a mixture of shrubs and graminoids, while vegetation within moist depressions was primarily graminoids. Low shrubs are defined to grow 8” to 3’ in height, while dwarf scrubs are defined to grew less than 8” in height. The surface shape of turf hummocks is convex and was observed to be better drained then the concave depressions. These differences in micro-relief and moisture likely resulted in different plant communities.

Photo 1.1	

Community Phase Number:	1.1	Community Phase Name:	scrub birch-mixed dwarf scrub-lichen scrubland

Community Phase Narrative:
When compared to depressions, hummocks tended to have greater cover of low and dwarf shrubs, moss, and lichen. The most abundant low shrubs were *Betula glandulosa*, while the most abundant dwarf scrubs were *Betula nana* and *Vaccinium uliginosum*. Graminoids are less dominant on hummocks then in moist depression communities, and a common species was *Carex bigelowii*. Forbs were a minor vegetative component. Lichen and moss cover were equally distributed on hummocks. While diversity of lichen was high (i.e. 12 species), cover was generally limited for any individual species.

Community Pathways	
Pathway Number	Pathway Name & Description
1.1a	No pathway observed.

Photo 1.1 m	See above.

Community Phase Number:	1.1m	Community Phase Name:	Willow-mixed dwarf scrub-sedge scrubland

Community Phase Narrative:
When compared to the hummock community, moist depressions had greater graminoid cover and less shrub and lichen cover. Sedges composed the bulk of graminoid cover and common species included *Carex bigelowii*, *Eriophorum vaginatum*, and *Carex membranacea*. Shrubs were common and grew primarily in the low and dwarf stratums. Common shrubs were *Salix sp*. Forbs and lichen were a minor vegetative component.

Community Pathways	
Pathway Number	Pathway Name & Description
1.2A	No pathway observed.